



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/750,856	01/05/2004	David Pincu	PDS-012-US1	3887
39933	7590	07/13/2006	EXAMINER	
POWERDSINE LTD. C/O LANDONIP, INC 1700 DIAGONAL ROAD, SUITE 450 ALEXANDRIA, VA 22314-2866			KAPLAN, HAL IRA	
			ART UNIT	PAPER NUMBER
			2836	

DATE MAILED: 07/13/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

31

Office Action Summary

Application No.

10/750,856

Applicant(s)

PINCU ET AL.

Examiner

Hal I. Kaplan

Art Unit

2836

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 03 July 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-40 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1, 14-18, 21 and 34-38 is/are rejected.
- 7) ☒ Claim(s) 2-13, 19, 20, 22-33, 39 and 40 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 03 July 2006 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Drawings

1. The drawings were received on July 3, 2006. These drawings are accepted.

Claim Rejections - 35 USC § 102

2. The indicated allowability of claims 1, 14-18, 21, and 34-38 is withdrawn in view of the newly discovered reference(s) to Fiorina et al. and Oglesbee et al. Rejections based on the newly cited reference(s) follow.
3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

4. Claims 1, 14, 17, 18, 21, 34, 37, and 38 are rejected under 35 U.S.C. 102(b) as being anticipated by the US patent of Fiorina et al. (5,221,862).

As to claims 1 and 21, Fiorina discloses a power supply system read on the claimed power pooling system, comprising: a plurality of DC electrical power consuming and providing entities (7), each of the plurality of DC electrical power consuming and providing entities (7) having at least a first operative mode in which it may provide more electrical power than it consumes and a second operative mode in which it may consume more electrical power than it provides; DC electrical power interconnections (12,18,20), interconnecting said plurality of DC electrical power consuming and providing entities (7) and permitting electrical power flow thereto and therefrom; and at least one pooling controller (15) operative to vary the current of

Art Unit: 2836

electrical power provided by at least one of the plurality of DC electrical power consuming and providing entities (7) (see column 2, lines 28-61).

As to claims 14 and 34, the plurality of DC electrical power consuming and providing entities (7) comprise battery pack modules (see column 3, lines 25-27).

As to claims 17 and 37, the system of Fiorina further comprises a power supply module interconnected with at least one of the DC electrical power interconnections, the power supply module operative to supply power to at least one of the plurality of DC electrical power consuming and providing entities when the at least one DC electrical power consuming and providing entity is operative in the second mode (see column 2, lines 14-18 and 28-61, and the Figure).

As to claims 18 and 38, the power supply module is operative in response to an output of the pooling controller (15) (see 44-61).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.

4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

7. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

8. Claims 15, 16, 35, and 36 are rejected under 35 U.S.C. 103(a) as being unpatentable over Fiorina in view of the US patent of Oglesbee et al. (6,608,470).

As to claims 15, 16, 35, and 36, Fiorina discloses all of the claimed features, as set forth above, except for an overcurrent protection circuit comprising at least one of a fuse and a circuit breaker, in combination with the remaining claimed features.

Oglesbee, drawn to an overcharge protection device and methods for lithium based rechargeable batteries, discloses an overcurrent protection circuit comprising a fuse (322) operative to prevent excess power flow during charging of a battery (5) (see column 3, lines 58-67; column 4, lines 2-4 and 15-18; and Figure 5). It would have been obvious to one of ordinary skill in the art, at the time of the invention, to modify the system of Fiorina to include fuses to prevent excess power flow to the batteries, in order to protect the batteries from overcharge conditions.

Allowable Subject Matter

9. Claims 2-13, 19, 20, 22-33, 39, and 40 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

10. The following is a statement of reasons for the indication of allowable subject matter:

Claims 2-5, 7, 13, 22-25, 27, and 33 contain allowable subject matter because none of the prior art of record discloses or suggests each of the DC electrical power consuming and providing entities comprising at least one power source in addition to at least one load, in combination with the remaining claimed features.

Claims 6 and 26 contain allowable subject matter because none of the prior art of record discloses or suggests the controller receiving information for each separate DC electrical power consuming and providing entity, in combination with the remaining claimed features.

Claims 8-11 and 28-31 contain allowable subject matter because none of the prior art of record discloses or suggests a supply interface unit associated with at least one of the DC electrical power interconnections, in combination with the remaining claimed features.

Claims 12 and 32 contain allowable subject matter because none of the prior art of record discloses or suggests at least one of the plurality of DC electrical power consuming and providing entities comprising a temperature sensor, in combination with the remaining claimed features.

Claims 19 and 39 contain allowable subject matter because none of the prior art of record discloses or suggests a battery pack module supplying power to at least one of the plurality of DC electrical power consuming and providing entities, in combination with the remaining claimed features.

Claims 20 and 40 contain allowable subject matter because none of the prior art of record discloses or suggests the DC electrical power interconnections being arranged in a hierarchical star or ring topology, in combination with the remaining claimed features.

Response to Arguments

11. Applicant's arguments with respect to claims 1-40 have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

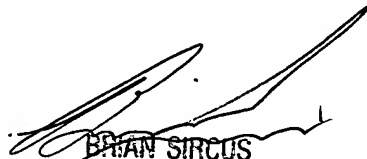
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hal I. Kaplan whose telephone number is 571-272-8587. The examiner can normally be reached on M-F 8:30-5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Sircus can be reached on 571-272-2800 x36. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2836

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

hik



BRIAN SIRCUS
SUPERVISORY PATENT EXAMINER
TECHNOLOGY CENTER 2836